IN THE CLAIMS:

1. (Original) A printer cartridge comprising a series of magnetic elements selected to counterbalance a series of magnetic elements on a printer, and each positioned to lie adjacent to a corresponding magnetic field detecting switch on the printer, where the position of the magnetic elements on the cartridge are located so as to change a condition of the corresponding magnetic field detecting switch when the cartridge is inserted into the printer.

2. (Original) The printer cartridge of claim 1 wherein the magnetic field detecting switch comprises a reed switch.

3. (Original) The printer cartridge of claim 1 wherein each magnetic field detecting switch comprises an element of a cartridge identification code.

4. (Original) A printer cartridge identification system comprising:

a printer cartridge having a plurality of magnetic elements disposed opposite a plurality of magnetic field detecting switches located on a printer; and

a printer having the plurality of magnetic field detecting switches corresponding to the plurality of magnetic elements on the printer cartridge and a plurality of fixed magnetic elements adjacent the plurality of magnetic field detecting switches, each fixed magnetic element biasing one of the magnetic field detecting switches to a first position; and

where the magnetic field detecting switches cooperate to define a printer cartridge identification code.

5. (Original) The printer cartridge identification system of claim 4 wherein the magnetic elements on the printer cartridge are of a size and strength to counterbalance the fixed magnetic elements on the printer when the cartridge is located in the printer.

6. (Original) A printer cartridge identifying printer comprising:

a magnetic field detecting switch adjacent a printer cartridge port and adapted to switch from a first position to a second position when a magnet on the printer cartridge is brought in proximity with the magnetic field detecting switch;

circuitry on the printer for evaluating the position of the magnetic field detecting switch and determining whether the cartridge in the printer is of a specific type; and

a fixed magnetic element adjacent the magnetic field detecting switch to bias the magnetic field detecting switch to a predetermined position.

7. (Original) A printer cartridge identification system comprising:

a printer comprising a plurality of magnetic field detecting switches adjacent to a plurality of fixed magnetic elements on the printer; each fixed magnetic element having a magnetic field of a predetermined polarity and each magnetic field detecting switch having a first biased position and a neutral position; and

a printer cartridge having a plurality of magnetic elements; each magnetic element having a magnetic field of identical polarity to a corresponding fixed magnetic element on the printer, whereby the magnetic field of the magnetic element on the printer cartridge interacts with the magnetic field of its corresponding fixed magnetic element on the printer to allow return of the adjacent magnetic field detecting switch to the neutral position from the first biased position.

8. (Original) The printer cartridge identification system of claim 7 where a combination of magnetic field detecting switches define a printer cartridge identification code.

9. (Original) The printer cartridge identification system of claim 8 where the printer further comprises circuitry for evaluating the printer cartridge identification code by reading the position of each magnetic field detecting switch.

10. (Original) The printer cartridge identification system of claim 7 where the magnetic field detecting switches comprise reed switches.

11. (New) A device comprising:

a printer cartridge assembly; and

a first magnet coupled to the printer cartridge assembly, the first magnet selected to counterbalance a second magnet on a printer, the first and second magnets positioned to lie adjacent to a magnetic field detecting switch on the printer, wherein the position of the first magnet on the cartridge is located so as to change a condition of the magnetic field sensed by the magnetic field detecting switch when the cartridge is inserted into the printer.

12. (New) The device of claim 11 wherein the magnetic field detecting switch comprises a reed switch.

13. (New) The device of claim 11 wherein the magnetic field detecting switch is an element of a cartridge identification code.

14. (New) A printer cartridge identification system comprising:

a printer cartridge including a first magnet; and

a printer including a first magnetic field detecting switch and a second magnet adjacent the first magnetic field detecting switch, the second magnet biasing the magnetic field detecting switch to a first position, wherein the first magnet changes the magnetic field sensed by the magnetic field detecting switch.

15. (New) The printer cartridge identification system of claim 14 wherein the first magnet on the printer cartridge is of a size and strength to counterbalance the second magnet on the printer when the cartridge is located in the printer.

16. (New) A printer cartridge identification system comprising:

a printer including a first magnetic field detecting switch,

a first magnet adjacent the first magnetic field detecting switch on the printer, the first magnet having a magnetic field of a predetermined polarity and the magnetic field detecting switch having a first biased position and a neutral position; and

a printer cartridge having a second magnet, the second magnet having a magnetic field of identical polarity to the first magnet on the printer, whereby the magnetic field of the second magnet interacts with the magnetic field of the first magnet on the printer to allow return of the magnetic field detecting switch to the neutral position from the first biased position.

17. (New) The printer cartridge identification system of claim 16 where the position of the magnetic field detecting switch contributes to define a printer cartridge identification code.

18. (New) A printer cartridge comprising:

a printer cartridge housing; and

a first magnet attached to the printer cartridge housing, the first magnet positioned to lie adjacent to a magnetic field detecting switch and a second magnet on a printer, when the printer cartridge is inserted into the printer, wherein the position of the first magnet on the cartridge is located so as to change a condition of the magnetic field detected by the magnetic field detecting switch when the cartridge is inserted into the printer.

19. (New) The printer cartridge of claim 18 wherein the magnetic field of the first magnet causes the magnetic field detecting switch to change from a first position to a second position when the printer cartridge is inserted into the printer.

20. (New) The printer cartridge of claim 18 wherein the position of the magnetic field detecting switch contributes to define a printer cartridge identification code.